



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,359	07/09/2003	Fred Thomas Bizzarro	20400 US6	1357
151	7590 02/06/2004		EXAM	INER
	N-LA ROCHE INC. W DEPARTMENT		WRIGHT, SONYA N	
340 KINGSLAND STREET NUTLEY, NJ 07110			ART UNIT	PAPER NUMBER
			1626	

DATE MAILED: 02/06/2004

RESPONSE DUE: March 6, 2004

Please find below and/or attached an Office communication concerning this application or proceeding.

STATUTORY

PERIOD EXPIRES: _____

June 6 2004

FEB | | 2004

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OIPE		
(1)	Application No.	Applicant(s)
MAR 0 8 2004 H Office Action Surimary	10/616,359	BIZZARRO ET AL.
Office Action Summary	Examiner	Art Unit
TA DE PARENT	Sonya Wright	1626
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 136(a). In no event, however, may a ply within the statutory minimum of thin d will apply and will expire SIX (6) MOI tte. cause the application to become A	reply be timely filed ty (30) days will be considered timely. THS from the mailing date of this communication.
Status		•
1) Responsive to communication(s) filed on		
	is action is non-final.	
3) Since this application is in condition for allow		ters, prosecution as to the merits is
closed in accordance with the practice under		
Disposition of Claims		
4)⊠ Claim(s) <u>1-278</u> is/are pending in the applicati	on	:
4a) Of the above claim(s) is/are withdra		
5) Claim(s) is/are allowed.	ann nom concluciation.	
6) Claim(s) is/are rejected.		
7) Claim(s) is/are objected to.		•
8) Claim(s) 1-278 are subject to restriction and/o	or election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examin	er.	
10) ☐ The drawing(s) filed on is/are: a) ☐ acc		by the Examiner.
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct		
11)☐ The oath or declaration is objected to by the E		
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		119(a)-(d) or (f).
1. Certified copies of the priority documen		
2. Certified copies of the priority documen		
3. Copies of the certified copies of the price		received in this National Stage
application from the International Burea	• • • • • • • • • • • • • • • • • • • •	
* See the attached detailed Office action for a list	t of the certified copies not	received.
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Attachment(s)		Deboral
Notice of References Cited (PTO-892)	4) 🔲 Interview S	ummary (PTO-413) Lamblun
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s 5) Notice of In 6) Other:	ummary (PTO-413))/Mail Date formal Patent Application (PTO-152) McAa
Patent and Trademark Office OL-326 (Rev. 1-04) Office A	ction Summary	Part of Paper No./Mail Date 0204
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DETAILED ACTION

Claims 1-278 are pending in this application.

Election/Restriction

1. The Markush group set forth in the claims includes both independent and distinct inventions, and patentably distinct compounds(or species) within each invention.

Further, this application discloses and claims a plurality of patentably distinct inventions far too numerous to list individually. Moreover, each of these inventions contains a plurality of patentably distinct compounds, also far too numerous to list individually. For these reasons provided below, restriction to one of the following Groups is required under 35 U.S.C. 121, wherein an Group is a set of patentably distinct inventions of a broad statutory category (e.g. Compounds, Methods of Use, Methods of Making, etc.): Group I, claim(s) 1-4, and 150-252, 270, and 275, drawn to compounds of formula I wherein R⁴ is pyridine, classified in classes 546, subclass 329+.

Group II, claim(s) 1-149, 267-278 drawn to compounds of formula I wherein R⁴ is thiazole and thiadiazole, classified in classes 548 and subclass 125+.

Group III, claim(s) 1-4, 253-259, 270, and 275 drawn to drawn to compounds of formula I wherein R⁴ is imidazole, classified in class 548 subclass 215.

Group IV, claim(s) 1-4, and 260-266, 270, and 275, drawn to compounds of formula I wherein R⁴ is isoxazole and oxazole classified in class 548 subclass 215+.

2. Applicant is required to elect of one of Invention Sets I-IV above. Alternately, Applicant may elect a group not listed above wherein R4 is limited to a single

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heteroaromatic ring, and the claims that are commensurate in scope with the elected group will be examined.

In accordance with the decisions in *In re Harnisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and *Ex parte Hozumi*, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984), restriction of a Markush group is proper where the compounds within the group either (1) do not share a common utility, or (2) do not share a substantial structural feature disclosed as being essential to that utility. In addition, a Markush group may encompass a plurality of independent and distinct inventions where two or more members are so unrelated and diverse that a prior art reference anticipating the claim with respect to one of the members would not render the other member(s) obvious under 35 U.S.C. 103.

3. Where an election of any one of the Groups supra is made, an election of a single compound (or set of compounds) is further required including an exact definition of each substitution on the base molecule (Formula I), wherein a single member at each substituent group or moiety is selected. For example, if a base molecule has a substituent group R1, wherein R1 is recited to be any one of hydrogen, halo, amino, etc. ..., then applicant must select a single substituent of R1, for example hydrogen or halo, and each subsequent variable position. In the instant case, upon election of a single compound (or set of compounds), the Office will review the claims and disclosure to determine the scope of the independent invention encompassing the elected compound (compounds which are so similar thereto as to be within the same inventive concept and reduction to practice). The scope of an independent invention will encompass all

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compounds within the scope of the claim which fall into the same class and subclass as the elected compound (or set of compounds), but may also include additional compounds which fall in related subclasses. Examination will then proceed on the elected compound AND the entire scope of the invention encompassing the elected compound. A clear statement of the examined invention, defined by those class(es) and subclass(es) will be set forth in the first action on the merits. Note that the restriction requirement will not be made final until such time as applicant is informed of the full scope of compounds along with process of using said compound under examination. This will be set forth by reference to specific class(es) and subclass(es) examined. Should applicant traverse on the ground that the compounds are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the compounds to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C 103(a) of the other.

All compounds falling outside the class(es) and subclass(es) of the selected compound and any other subclass encompassed by the election above will be directed to nonelected subject matter and will be withdrawn from consideration under 35 U.S.C. 121 and 37 C.F.R. 1.142(b). Applicant may reserve the right to file divisional applications on the remaining subject matter. The provisions of 35 U.S.C. 121 apply with regard to double patenting covering divisional applications.

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Applicant is reminded that upon cancellation of claims to a non-elected invention, the inventors must be amended in compliance with 37C.F.R. 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 C.F.R. 1.48(b) and by the fee required under 37CFR 1.17(i).

If desired upon election of a single compound, Applicants can review the claims and disclosure to determine the scope of the invention and can **set forth** a group of compounds which are so similar within the same inventive concept and reduction to practice. Markush claims must be provided with support in the disclosure for each member of the Markush group. See MPEP 608.01(p). Applicant should exercise caution in making a selection of a single member for each substituent group on the base molecule to be consistent with the written description.

Rationale Establishing Patentable Distinctiveness Within Each Group

Each Invention Set listed above is directed to or involves the use or making of compounds which are recognized in the art as being distinct from one another because of their diverse chemical structure, their different chemical properties, modes of action, different effects and reactive conditions (MPEP 806.04, MPEP 808.01). Additionally, the level of skill in the art is not such that one invention would be obvious over either of the other inventions, i.e. they are patentable over each other. Chemical structures which are similar are presumed to function similarly, whereas chemical structures that are not similar are not presumed to function similarly. The presumption even for similar chemical structures though is not irrebuttable, but may be overcome by scientific

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reasoning or evidence showing that the structure of the prior art would not have been expected to function as the structure of the claimed invention. Note that in accordance with the holdings of <u>Application of Papesch</u>, 50 CCPA 1084, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and <u>In re Lalu</u>, 223 USPQ 1257 (Fed. Cir. 1984), chemical structures are patentably distinct where the structures are either not structurally similar, or the prior art fails to suggest a function of a claimed compound would have been expected from a similar structure.

The above Groups represent general areas wherein the inventions are independent and distinct, each from the other because of the following reasons:

Groups I, II, III, and IV <u>supra</u> are distinct, each from the other, because they differ in structure and/or element so as to be patentably distinct, and a prior art reference anticipating but one of the groups would not render obvious the other groups under 35 U.S.C. 103 (MPEP 806.04(f)). Each group is capable of supporting its own patent. Examination of more than one of the above groups would be an undue burden as it would require additional search in both the patent and non-patent literature.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Joseph K. McKane

Supervisory Patent Examiner

Group 1600

Sonya Wright

February 2, 2004